## **Press Release**



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**OPR:** National Highway Planning and Construction Division, MOLIT **Contact Information :** CHOI You Suk, KIM Bong Jae (044-201-4768, 3892)

#Boryeong#UnderseaTunnel#NATM#IMG

#### Korea's Longest Undersea Tunnel to be unveiled on 1 December

-Creating a tourism belt in the West Sea--Paving the way for effective logistics-

The Ministry of Land, Infrastructure and Transport (MOLIT, Minister NOH Hyeong-ouk) announced that the Boryeong Undersea Tunnel, the longest undersea tunnel in South Korea, will open to the public on December 1 at 10:00.

The tunnel, linking Daecheon Port in Boryeong-si and Wonsan Island in Ocheon-myeon, South Chungcheong Province, have gone through construction from December 2010 with the total project cost of 488.1 billion won and is now the longest undersea tunnel in Korea and fifth longest in the world.

With the undersea tunnel length of 5.2 km and total length of 6.9 km, the Boryeong Undersea Tunnel adopted the NATM method<sup>1</sup>, which was the first for Korea, and developed the IMG method<sup>2</sup> to effectively block any infiltration of sea water, raising the construction technology of South Korea to another level.

In link with the sea bridge from Boryeong to Taean constructed in 2019, the Boryeong Undersea Tunnel will shorten the travel length from Daecheon Beach to Yeongmok Port in Anmyeon Island from 95 km to 14 km and travel time from 90 minutes to 10 minutes.

Mr. Yun-Sang Lee, Assistant Minister for Road of MOLIT said "The opening of the Boryeong Undersea Tunnel will create a new tourism belt in the West Sea and will pave the way for effective logistics"

For further information regarding the above article or request for covers, please contact CHOI You Suk (044-201-4768) or KIM Bong Jae (044-201-3892)

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<sup>&</sup>lt;sup>1</sup> The New Austrian Tunneling Method, as known as NATM, is a method of drilling through rock masses for the purpose of creating tunnels by drilling holes within hardened rock masses and attaching explosive energy connected to explode in a certain order

<sup>&</sup>lt;sup>2</sup> Further developed from the prior grouting technology, the Intelligent Multi Grouting, as known as IMG, is a method of preventing infiltration of exterior pollutants(ie. sea water) by minimizing damage of near facilities and monitoring the entire process of grouting by optimizing and controlling pressure and flow and conducting precision control of time with consideration of the nature of each section of grounds



#### <<Domestic>>

| - | Tunnel                       | Method of construction | Length  | Year of<br>Completion | Location     |
|---|------------------------------|------------------------|---------|-----------------------|--------------|
| 1 | Boryeong Undersea<br>Tunnel  | NATM                   | 6.93 km | 2021                  | Boryeong     |
| 2 | Incheon North Port<br>Tunnel | NATM                   | 5.5 km  | 2017                  | Incheon      |
| 3 | Gadeok Tunnel                | Immersed<br>Tunnel     | 3.7 km  | 2010                  | Geoje Island |

### <<International>>

| - | Tunnel                      | Method of construction | Length  | Year of<br>Completion | Nation |
|---|-----------------------------|------------------------|---------|-----------------------|--------|
| 1 | Aqua line                   | TBM                    | 9.50 km | 1997                  | JPN    |
| 2 | Bomlafjord                  | NATM                   | 7.90 km | 2000                  | NOR    |
| 3 | Eiksund                     | NATM                   | 7.80 km | 2007                  | NOR    |
| 4 | Oslofjord                   | NATM                   | 7.20 km | 2000                  | NOR    |
| 5 | Boryeong Undersea<br>Tunnel | NATM                   | 6.93 km | 2021                  | KOR    |

# <<Layout of the Boryeong Undersea Tunnel>>

